

Notice of Allowability

Application No.

09/992,084

Examiner

Daniel S. Metzmaier

Applicant(s)

JIANG ET AL.

Art Unit

1712

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to amendments file 2/4/2005 and the interview of 2/17/2005.
2. ☒ The allowed claim(s) is/are 30-41 and 51-60.
3. ☒ The drawings filed on 10 September 2004 are accepted by the Examiner.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some* c) ☐ None of the:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).
- * Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
- (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
- 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
- (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- | | |
|---|---|
| 1. <input type="checkbox"/> Notice of References Cited (PTO-892) | 5. <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 6. <input checked="" type="checkbox"/> Interview Summary (PTO-413),
Paper No./Mail Date <u>2/17/05</u> . |
| 3. <input type="checkbox"/> Information Disclosure Statements (PTO-1449 or PTO/SB/08),
Paper No./Mail Date _____ | 7. <input checked="" type="checkbox"/> Examiner's Amendment/Comment |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit
of Biological Material | 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance |
| | 9. <input type="checkbox"/> Other _____ |

EXAMINER'S AMENDMENT

Claims 30-41 and 51-60 are allowed.

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it **MUST** be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Marcella D. Watkins on February 17, 2005.

The application has been amended as follows:

The amendment to the claims begins on page 3 of this paper.

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

1 -- 9 (cancelled).

10. (Canceled)

11. (Canceled)

12-15. (Canceled)

16-17. (Canceled)

18-29. (Canceled).

30. (Currently amended) A method for preparing a second-generation colloid comprising the steps of:

- (a) providing a colloidal template;
- (b) infiltrating said colloidal template with polymerizable components;
- (c) polymerizing said polymerizable components;
- (d) selectively removing said colloidal template to yield a porous polymer;
- (e) heating said porous polymer above its glass transition temperature;
- (f) deforming said porous polymer such that said porous polymer includes non-spherical pores;
- (g) cooling said porous polymer below its glass transition temperature;
- (h) depositing a material into the non-spherical pores of said porous polymer so as to form said material into ellipsoidal particles having an aspect ratio between 1.47 and 5.0; and
- (i) selectively removing said porous polymer to form a second-generation colloid.

31. (Original) The method according to claim 30 wherein said colloidal template is an ordered, monodisperse colloid; said porous polymer is an ordered, monodisperse macroporous polymer; and said second-generation colloid is an ordered, monodisperse colloid.

32. (Original) The method according to claim 31 wherein said second-generation colloid comprises a ceramic material.
33. (Original) The method according to claim 31 wherein said second-generation colloid comprises a material selected from the group consisting of alumina, titania and zirconia.
34. (Original) The method according to claim 31 wherein said second-generation colloid comprises an inorganic salt.
35. (Original) The method according to claim 31 wherein said second-generation colloid comprises a material selected from the group consisting of cadmium sulfide and silver chloride.
36. (Original) The method according to claim 31 wherein said second-generation colloid comprises a metal.
37. (Original) The method according to claim 31 wherein said second-generation colloid comprises a material selected from the group consisting of nickel and gold.
38. (Original) The method according to claim 31 wherein said second-generation colloid comprises a polymer.
39. (Original) The method according to claim 31 wherein said second-generation colloid comprises a material selected from the group consisting of poly(p-phenylene vinylene) and polypyrrole.
40. (Original) The method according to claim 31 wherein said porous polymer comprises a material selected from the group consisting of poly(methyl methacrylate) and polystyrene.
41. (Previously presented) The method according to claim 31 wherein said second-generation colloid comprises oblate particles.
42. ~~(Canceled) The method according to claim 31, further comprising the step of deforming said porous polymer so that said second-generation colloid comprises ellipsoidal particles.~~
43. (Cancelled).
44. (Canceled)
45. (Canceled)
46. (Canceled)

47-50. (Canceled)

51. (New) The method according to claim 30 wherein said second-generation colloid comprises a ceramic material.

52. (New) The method according to claim 30 wherein said second-generation colloid comprises a material selected from the group consisting of alumina, titania and zirconia.

53. (New) The method according to claim 30 wherein said second-generation colloid comprises an inorganic salt.

54. (New) The method according to claim 30 wherein said second-generation colloid comprises a material selected from the group consisting of cadmium sulfide and silver chloride.

55. (New) The method according to claim 30 wherein said second-generation colloid comprises a metal.

56. (New) The method according to claim 30 wherein said second-generation colloid comprises a material selected from the group consisting of nickel and gold.

57. (New) The method according to claim 30 wherein said second-generation colloid comprises a polymer.

58. (New) The method according to claim 30 wherein said second-generation colloid comprises a material selected from the group consisting of poly(p-phenylene vinylene) and polypyrrole.

59. (New) The method according to claim 30 wherein said porous polymer comprises a material selected from the group consisting of poly(methyl methacrylate) and polystyrene.

60. (New) The method according to claim 30 wherein said second-generation colloid comprises oblate particles.

Reasons for allowance

2. The following is an examiner's statement of reasons for allowance: attention is directed to paragraph number 9 of the Final Office Action mailed December 1, 2004. The present examiner's amendments cancel the composition claims in favor of the allowance of the method claims indicated as allowable as noted above. The amendment to claim 30 is made to make the claims read more clearly and provide explicit antecedent basis for "said second-generation colloid". The cancellation of claim 42 is made to remove an issue of improper dependency under 37 CFR 1.75(c), as failing to further limit the subject matter of a previous claim.


Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Daniel S. Metzmaier whose telephone number is (571) 272-1089. The examiner can normally be reached on 9:00 AM to 5:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Randy P. Gulakowski can be reached on (571) 272-1302. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


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Primary Examiner
Art Unit 1712

DSM